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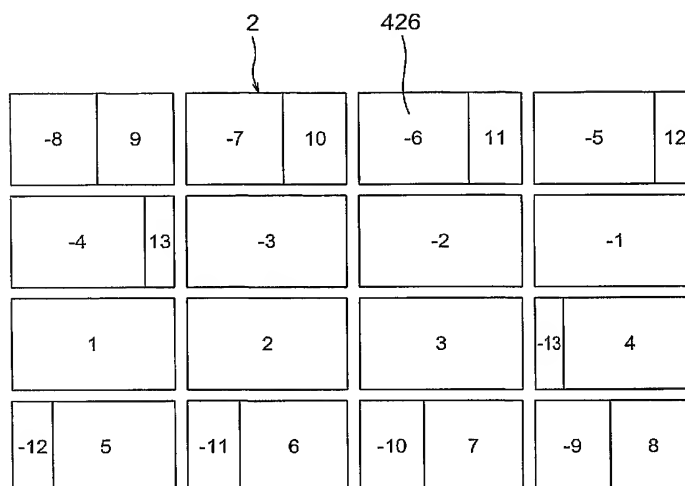
(57) Abstract: It is made possible to record stereoscopic image data of parallel-ray one-dimensional IP type in a format at a high compression rate with little image quality degradation. This stereoscopic image data can be efficiently decompressed and reproduced. A stereoscopic image data structure includes: a parallax component image data representing n or more parallax component images, each having accumulated pixels that cause the pixels to generate the parallel light rays in the same parallax direction in the viewing zone, and having different numbers of horizontal pixels. N combined images with the same numbers of vertical and horizontal pixels are a unit to be converted into a parallax interleaved image, the n combined images being formed by combining two or more parallax component images with parallax directions different from each other by n.